

In the Claims:

Cancel claims 88, 102, 104 and 118-121 without estoppel or disclaimer of the subject matter thereof.

Add new claims 124-129 and amend claims 81, 86, 89-92, 99-101, 103, 108, 111 and 123 as follows:

81. (Currently Amended) An energy delivery device for ablating biological tissue, comprising:

a flexible ablation assembly, comprising:

a flexible ablation device including a flexible body portion defining an outer surface that is substantially transparent to ablation energy and at least one ablation element operably disposed within the body portion to transmit ablation energy therethrough; and

a ~~means~~ shield disposed within a portion of the body portion for directionally controlling ablation energy emitted therefrom through the outer surface.

82. (Currently amended) The device of claim 81, wherein the at least one ablation element is adapted to emit sufficient ablation energy ~~sufficient~~ through the flexible body to ablate biological tissue.

83. (Canceled)

84. (Previously amended) The device of claim 82, wherein the at least one ablation element is flexible.

85. (Canceled)

86. (Currently amended) The device of claim 81, wherein the flexible body portion holds the ablation element in a fixed angular position relative to the ~~outer~~ shield.

87.-88 (Canceled)

89. (Currently amended) The device of claim ~~88, wherein the means~~ 81 in which the shield for directionally controlling the ablation energy is flexible.

90. (Currently amended) The device of claim 81 in which the, ~~wherein the means for directionally controlling the ablation energy is a shield device, whereby a portion is disposed to inhibit ablation~~ of biological tissue adjacent to the outer surface of the flexible body portion ~~is shielded from~~ not aligned with the controlled emission direction of the ablation energy.

91. (Currently amended) The device of claim 90, wherein the shield ~~device is adapted to~~ at least partially ~~reflect~~ reflects ablations energy emitted by the at least one ablation element toward the controlled direction of emission.

92. (Currently amended) The device of claim 91, wherein the shield ~~device~~ is flexible.

93. (Original) The device of claim 92, wherein the at least one ablation element is an antenna adapted to emit electromagnetic energy.

94. (Original) The device of claim 93, wherein the at least one ablation element is adapted to emit electromagnetic energy in the microwave range.

95. (Original) The device of claim 94, wherein the electromagnetic energy is at about 434 MHz.

96. (Original) The device of claim 94, wherein the electromagnetic energy is at about 915 MHz.

97. (Original) The device of claim 94, wherein the electromagnetic energy is at about 2.45 GHz.

98. (Original) The device of claim 94, wherein the electromagnetic energy is at about 5.8 GHz.

99. (Currently amended) The device of claim ~~94~~ 93, wherein the antenna is a helical coil antenna.

100. (Currently amended) The device of claim ~~94~~ 93, wherein the antenna is a linear antenna.

101. (Currently amended) The device of claim ~~90~~, ~~wherein a longitudinal axis of the~~ 93, comprising an insulating element is disposed generally coaxial with a longitudinal axis of the shield device.

102. (Canceled)

103. (Currently amended) The device of claim ~~102~~, wherein the ~~manipulation means is 81 comprising~~ a handle having proximal and distal ends, the flexible ablation assembly being operably attached to the distal end of the handle.

104. (Canceled)

105. (Currently Amended) The device of claim 103 further comprising a shaft member operably disposed between the flexible ablation assembly device and the handle.

106. (Original) The device of claim 105, wherein the shaft member is rigid.

107. (Original) The device of claim 106, wherein the shaft member is a metallic tube.

108. (Currently amended) The device of claim ~~104~~, 105 wherein the shaft member is malleable.

109. (Original) The device of claim 108, wherein the shaft member is a metallic tube.

110. (Original) The device of claim 108, wherein the shaft member is a coaxial cable.

111. (Currently amended) ~~An energy delivery~~ The device for ablating biological tissue, comprising:

~~a flexible ablation assembly including a flexible body portion and at least one ablation element operably disposed within the body portion, the flexible body~~

~~portion defining an outer surface through which ablation energy sufficient to ablate biological tissue, emitted by the at least one ablation element, passes,~~

~~wherein~~ of claim 81 in which the outer surface of the ablation assembly is adapted to be manipulated to one of a plurality of contact positions to generally conform the ablation controlled emission direction portion of the outer surface to the biological tissue during tissue ablation.

112. (Withdrawn) A method of ablating tissue at a target tissue site, comprising the steps:

providing a flexible ablation device defining an outer ablation surface and comprising a means for directionally controlling ablation energy emitted therefrom;

manipulating the distal portion of the ablation device to generally conform the ablation surface to a tissue surface at the target tissue site;

applying ablation energy sufficient to ablate tissue at the target tissue site.

113. (Withdrawn) The method of claim 112, wherein the ablation device comprises at least one ablation element.

114. (Withdrawn) The method of claim 113, wherein the at least one ablation element is an antenna.

115. (Withdrawn) The method of claim 112, wherein the ablation energy is one or more energies from the group consisting of: radiofrequency, microwave, and cryogenic.

116. (Withdrawn) The method of claim 112, wherein the means for directionally controlling the ablation energy is a shield device adapted to direct the ablation energy in a single direction along a longitudinal axis of the ablation device, whereby the step of applying ablation energy results in the creation of a continuous lesion.

117. (Withdrawn) The method of claim 116, wherein the step of applying ablation energy results in the isolation of at least one pulmonary vein from the epicardial surface of a patient's heart.

118-121. (Canceled)

122. (Previously added) The device of claim 81, wherein the at least one ablation element is slidably disposed within a receiving passage of the flexible body portion.

123. (Currently amended) The device of claim 122, ~~wherein~~ in which the body portion of the flexible ablation assembly further comprises a flexible tubular device having a lumen passing therethrough and disposed within the receiving passage, to slidably receive therein the at least one ablation element slidably disposed within the lumen of the flexible tubular device.

124. (Currently Amended) A flexible ablation assembly, comprising:
an elongate flexible body defining a contact surface along at least a portion of its length, said contact surface being configured to contact a surface of the heart;

a flexible ablative element having a longitudinal axis and being capable of emitting ablative energy generally radially about said longitudinal axis, said flexible ablative element being operably disposed within said flexible body in spaced relation to said contact surface to ~~inhibit~~ prevent said ablative element from contacting the surface of the heart; and

a shield disposed within said flexible body configured to transmit ablative energy to the surface of the heart through said contact surface and substantially prevent ablative energy from transmitting radially from said flexible body at locations other than said contact surface.

125. (New) The flexible ablation assembly as in claim 124 in which the ablative element emits electromagnetic energy supplied thereto.

126. (New) The flexible ablation assembly as in claim 125 in which the elongate flexible body is substantially transparent to the electromagnetic energy emitted by the ablative element.

127. (New) A flexible ablation assembly, comprising:

an elongate flexible body defining a contact surface along at least a portion of its length, said contact surface being configured to contact a surface of the heart; and having at least one lumen therein; and

a flexible ablative element having a longitudinal axis and being capable of emitting ablative energy generally radially about said longitudinal axis, said flexible

ablative element being slidably disposed within said lumen of said flexible body out of contact with the surface of the heart.

128. (New) The flexible ablation assembly as in claim 127 in which the ablative element emits electromagnetic energy supplied thereto.

129. (New) The flexible ablation assembly as in claim 128 in which the elongate flexible body is substantially transparent to the electromagnetic energy emitted by the ablative element.